UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

#### NOTICE OF ALLOWANCE AND FEE(S) DUE

25944 7590 04/06/2011 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850 EXAMINER

HAN, KWANG S

ART UNIT PAPER NUMBER

1727

DATE MAILED: 04/06/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,506	03/17/2006	Tae-Hyun Jeon	127333	4267

TITLE OF INVENTION: LITHIUM ION SECONDARY BATTERY HAVING ENHANCED WELDABILITY AND SEALING CAPABILITY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	07/06/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u> SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

#### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

maintenance fee notificat	tions.	or than Patent, advance or nerwise in Block 1, by (a	Feet	e: A certificate of n	nailing can only	be used for	domestic mailings of the
OLIFF & BER P.O. BOX 32085 ALEXANDRIA,		/2011	pape have	ers. Each additional e its own certificate Certi	paper, such as a of mailing or tra ficate of Mailir	an assignment nsmission. ng or Transm	or formal drawing, must
							(Depositor's name)
			_				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DO	CKET NO.	CONFIRMATION NO.
10/572,506	03/17/2006		Tae-Hyun Jeon		127333	3	4267
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL	FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0		61055	07/06/2011
			1	1	4	,1033	07/00/2011
EXAM		ART UNIT	CLASS-SUBCLASS	]			
HAN, KV  1. Change of corresponde		1727	429-174000				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME AT PLEASE NOTE: Unlo	ess an assignee is ident n in 37 CFR 3.11. Comp	"Indication form ed. Use of a Customer A TO BE PRINTED ON Tified below, no assignee	(1) the names of up to or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or type data will appear on the part of the	wely, e firm (having as a ragent) and the name rneys or agents. If n printed.  Dee) atent. If an assigne assignment.	member a 2_s of up to o name is 3_	elow, the doc	rument has been filed for
Please check the appropri	ate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🖵 Cor	poration or othe	er private grou	p entity 🗖 Government
4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			<ul> <li>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</li> <li>A check is enclosed.</li> <li>Payment by credit card. Form PTO-2038 is attached.</li> <li>The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).</li> </ul>				
• •	s SMALL ENTITY statu	is. See 37 CFR 1.27.	b. Applicant is no long d from anyone other than to Office.				
_							
Typed or printed name				-			
This collection of information application. Confident submitting the completed this form and/or suggestions 1450. Alexandria V.	ation is required by 37 C iality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450 DO	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary reden, should be sent to the NOT SEND FEES OF (1997).	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	retain a benefit by the timated to take 12 m ridual case. Any cor er, U.S. Patent and T O THIS ADDRESS	e public which i inutes to comple nments on the a rademark Office SEND TO: Cor	s to file (and the tee, including mount of time e, U.S. Departments for the tee to be	by the USPTO to process) gathering, preparing, and e you require to complete timent of Commerce, P.O.

Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,506	03/17/2006	Tae-Hyun Jeon	127333 4267	
25944 75	90 04/06/2011		EXAMINER	
OLIFF & BERRI	DGE, PLC	HAN, KWANG S		
P.O. BOX 320850				
ALEXANDRIA, VA 22320-4850			ART UNIT	PAPER NUMBER
			1727	

DATE MAILED: 04/06/2011

### **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 574 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 574 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

#### **Privacy Act Statement**

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)	
	10/572,506	JEON ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Kwang Han	1727	
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT F of the Office or upon petition by the applicant. See 37 CFR 1.31	pears on the cover sheet was (OR REMAINS) CLOSED or other appropriate common religious This application is and MPEP 1308.	vith the correspondence address in this application. If not included nunication will be mailed in due course	
1. This communication is responsive to the amendment filed	l on January 28, 2011.		
2. X The allowed claim(s) is/are 4,11,14,16 and 18.			
<ul> <li>3. Acknowledgment is made of a claim for foreign priority units a) All b) Some* c) None of the: <ol> <li>Certified copies of the priority documents have</li> <li>Certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>Copies of the certified copies of the priority documents have</li> <li>Certified copies not received:</li> </ol> </li> <li>Applicant has THREE MONTHS FROM THE "MAILING DATE"</li> </ul>	e been received. e been received in Applicat becuments have been receiv of this communication to f	ion No ed in this national stage application fro	
<ul> <li>noted below. Failure to timely comply will result in ABANDONI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.</li> <li>4. A SUBSTITUTE OATH OR DECLARATION must be subminiformal PATENT APPLICATION (PTO-152) which give</li> </ul>	nitted. Note the attached Ex		≣ OF
<ul> <li>5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") mu</li> <li>(a) ☐ including changes required by the Notice of Draftsper</li> <li>1) ☐ hereto or 2) ☐ to Paper No./Mail Date</li> </ul>	est be submitted. Eson's Patent Drawing Revi		
(b) ☐ including changes required by the attached Examiner Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in	's Amendment / Comment  1.84(c)) should be written on	the drawings in the front (not the back)	of
6. ☐ DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	osit of BIOLOGICAL MA	ΓΕRIAL must be submitted. Note th	ıe
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Paper No 7. ☐ Examiner	Informal Patent Application Summary (PTO-413), b./Mail Date s Amendment/Comment s Statement of Reasons for Allowance	<b>;</b>

Application/Control Number: 10/572,506 Page 2

Art Unit: 1727

# LITHIUM ION SECONDARY BATTERY HAVING ENHANCED WELDABILITY AND SEALING CAPABILITY

Examiner: K. Han SN: 10/572,506 Art Unit: 1727 April 3, 2011

#### **Detailed Action**

1. The Applicant's amendment filed on January 28, 2011 was received. Claim 4 was amended.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

# Claim Rejections - 35 USC § 103

- 3. The claim rejection under 35 U.S.C. 103(a) as unpatentable over Murashige in view of Watanabe et al. and Hiratsuka et al. on claims 4, 11, 16, and 18 is withdrawn, because independent claim 4 has been amended.
- 4. The claim rejection under 35 U.S.C. 103(a) as unpatentable over Murashige, Watanabe et al. and Hiratsuka et al. as applied to claim 4 and further in view of Kunkel on claim 14 is withdrawn, because independent claim 4 has been amended.

#### Reasons for Allowance

5. The following is an examiner's statement of reasons for allowance: Claims 4, 11, 16, and 18 are allowed. Independent claim 4 recites a lithium ion secondary battery can having a protruded terminal connected to one of the cathode plate and the anode plate

Art Unit: 1727

protruding through only the second lower surface to an outside of the can and located between the first side wall and the second side wall and located inwardly from the second side wall toward the defined space. The closest prior art of record Murashige, Watanabe et al., and Hiratsuka et al. do not recite a case with a terminal located and through the second lower surface as defined in the limitations of the independent claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Contact/Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang Han whose telephone number is (571) 270-5264. The examiner can normally be reached on Monday through Friday 8:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on (571) 272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/572,506 Page 4

Art Unit: 1727

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. H./ Examiner, Art Unit 1727

/Dah-Wei D. Yuan/ Supervisory Patent Examiner, Art Unit 1727